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ABSTRACT

Early psychological studies of "genius" are examined, and reasons why European studies of eminent people never developed into true academic quality rankings are considered. In Europe, and especially England, France, and Germany, the ecological origins of eminent men and women were assessed: where they grew up, where they attended school, and whether and where they attended a university. Most of those who wrote about the university backgrounds of eminent people attributed geniuses to be the product of either heredity or their environment. Alick Maclean's rank ordering of universities in England, Scotland, and Ireland that had "produced" distinguished people came close to being a true academic quality ranking. Academic quality rankings developed in the United States and were a useful means of recording the outcome of competition of universities for students and financial support. Universities in France and Germany were assured a steady source of income by the government whether or not they excelled relative to others, and in each European nation there were relatively few universities. In Europe there was not nearly as much range in the quality of universities, while in the United States there is diversity in curricular offerings and types of institutions. Additionally, European countries were much smaller geographically than the United States and European universities were much older and had established reputations regarding quality. The existence of national licensing examinations in each discipline in European countries and the fact that European students commonly attended several universities were additional reasons why rank orders of universities were not greatly needed in Europe. (SW)

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EARLY PSYCHOLOGICAL STUDIES OF "GENIUS" AND ACADEMIC QUALITY RANKINGS

A paper to be presented to the 89th annual convention of the American Psychological Association, Division 26, Los Angeles, August 25, 1981

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In this paper, I consider an important forerunner of academic quality rankings. This forerunner was the works, published mostly in Europe and especially England, France, and Germany, about the ecological origins of eminent men and women -- where they were born, where they grew up, where they attended school and -- what concerns us most here -- whether and where they attended a university, since from lists of how many eminent people had attended various universities academic quality rankings could easily have developed.[1] Most of those who wrote about the university backgrounds of eminent people took one side or another of a hot debate about whether such "geniuses" -- as the participants in this debate often called them -- were more the "result" of their heredity or their environment.[2] I will discuss first the contributions of the environmentalists, then those of the hereditarians, and finally the contribution of a man who was neither, but who seems to have come closer than anyone else to producing a true academic quality ranking.

The Environmentalists

One of the first great environmentalists was the

Swiss botanist Alphonse de Candolle.[3] In his Histoire des Sciences et des Savants depuis Deux Siècles, he listed eighteen factors he considered favorable to the advancement of science, including two directly concerning education:

> Elementary, and especially middle and higher instruction, that is well-organized, independent of political or religious factions, tending to inspire research and to encourage young people and instructors devoted to science.

And also:

> Abundant and well-organized material means for various kinds of scientific work (libraries, observatories, laboratories, collections).[4]

Another early environmentalist was Alfred Odin (1884-1896), professor at the University of Sofia in Bulgaria. In his short life he authored several works on phonology and grammar and a major work, in two volumes, on the origin of French men of letters, Genèse des Grands Hommes: Gens de Lettres Francais Modernes.[5] In it, he wrote:

> Everything...forces us to admit that education plays a role not only important but principal, decisive, in the development of the man of letters. It operates not only on average ability, but also, and with quite as much intensity, on talent and on genius.[6]

A third strict environmentalist and, along with William James, one of the few first-rate American thinkers to participate in this debate, was the early sociologist Lester F. Ward, author of Dynamic Sociology (1883), The Psychic Factors of Civilization (1893), Outlines of Sociology (1898), Pure Sociology (1903), and Applied

Sociology (1906). An ardent believer that people could improve society and that an improved society could, in turn, serve to improve individual people in an endless cycle of progress, he wrote in Applied Sociology:

> It is evident, then, that education is absolutely indispensable at least to a literary career, and it is practically so to any career in a civilized community. This means that all who are without it are debarred at the outset from all hope of ever joining the forces of civilization. All the achievement of the world has been done by educated persons.[7]

And later in the same book he wrote, in the same vein, "genius, however brilliant, cannot succeed without education."[8]

The Hereditarians

Next I turn to the hereditarians, who were far more numerous than the environmentalists[9] and who also came far closer to producing a "true" academic quality ranking.

The first great hereditarian was Francis Galton, himself a member of a distinguished family; he was related to Charles and Erasmus Darwin. In 1865 he published a two-part paper in Macmillan's Magazine titled "Hereditary Talent and Character." In it, after examining lists of eminent people -- almost, but not quite all, of them men -- in several lines of endeavor and finding that many of them had distinguished relatives, even in fields like writing and painting in which Galton believed it was hard for parents to "pass on" their advantages to their children,

he concluded that superior intellectual ability resulted mostly from heredity.[10] In 1869 he published Hereditary Genius, in which he claimed to be the first person ever to use detailed statistical evidence to argue that genius was hereditary (p. vi). In 1874, in response to Candolle's Histoire des Sciences et des Savants depuis Deux Siècles, he published English Men of Genius: Their Nature and Nurture,[11] whose subtitle introduced "one of the most important and controversial distinctions in the social sciences ever since . . . ."[12] This book, based on the replies that more than 100 scientists made to a long questionnaire Galton sent them, attempted to provide "a Natural History of the English Men of Science of the present day."[13] Of the scientists he surveyed, Galton concluded the following about their university education:

> One-third of those who sent replies have been educated at Oxford or Cambridge, one-third at Scotch, Irish or London universities, and the remaining third at no university at all. I am totally unable to decide which of the three groups occupies the highest scientific position: they seem to me very much alike in this respect.[14]

Already, then, by 1874 a "genius" study contained a calculation of the percentage of eminent men who had graduated from particular universities -- at least, from Oxford, Cambridge, and London -- not just from all universities as a group.

Another strict hereditarian was Théodule Ribot, Professor of Comparative and Experimental Psychology at the

College of France, whose many works, in all their editions and translations, run to almost 200 listings in the National Union Catalog, Pre-1956 Imprints.[15] Ribot believed that on people of genius, as opposed to more ordinary people, education had almost no effect.

> We think it is restricting the influence of education to its just limits to say: it is never absolute and has a decided influence only on average natures. Suppose the various degrees of human intelligence to be arranged in such a way that they should form one immense linear series extending from idiocy at one extreme to genius at the other. In our opinion, the influence of education at the two ends of the series is at its minimum. Upon the idiot it has almost no effect: extraordinary efforts, marvels of patience and skill, often end in insignificant and ephemeral results. But as we rise toward the medium grades this influence increases. It attains its maximum in those average natures who, being neither good nor bad, are about what chance makes them. Then, if we rise toward the higher forms of intelligence we see it again diminish, and as the highest genius is approached, it tends toward its minimum.[16]

Sometimes the hereditarians, instead of comparing those who had graduated from universities with those who had not, compared students from a particular university who had been successful in school with those who had been much less successful. An example of this type of study is the anonymous 1882 article in Cornhill Magazine about the Cambridge University senior wranglers. (The senior wrangler was the student who, each year, achieved the highest grade in Cambridge U.'s mathematics honors examination; since, in the late 19th century, the senior class at

Cambridge averaged some 400-450 students,[17] being senior wrangler was a very great distinction). Discussing senior wranglers going back to 1748 and how they had fared in later life, the author concluded:

> . . . the most obvious inference . . . is that very little can be inferred. Universities and schools calmly speak of 'producing' great men, when all that can be safely said is that they have not put an end to them.[18]

Another writer who on at least one occasion took a strong hereditarian position was James Sully, the early British psychologist, author of Sensation and Intuition (1874), The Human Mind (1892), Studies of Childhood (1895) and other books, and Grote Professor of Philosophy of Mind and Logic at the University of London's University College. In his well-known Outlines of Psychology with Special Reference to the Theory of Education (1885), he had taken the position that heredity and environment were both vital to the intellectual development of ordinary people.[19] But writing about eminent men in the English Illustrated Magazine in 1891, he named many who had had academic difficulties and been severe disciplinary problems in school and wrote that:

> The conclusion that seems to be forced on us by the study of the lives of men of letters is that they owe a remarkably small portion of their learning to the established machinery of instruction. A good number have only very imperfectly come under the influence of the educational system, while a large fraction of those who have been more fully subjected to it have been too little in harmony with its

> spirit and methods to derive from it any large and substantial profit.[20]

Almost 40 years after Galton had spurred the debate about whether nature or nurture "produced" eminent men and women, the hereditarian side of the debate produced an actual list of universities in order of how many eminent people had attended them. Havelock Ellis, the British editor, art and literary critic, and author of the seven-volume Studies in the Psychology of Sex, provided such a rank order in his A Study of British Genius (1904) in the following passage:

> Stated somewhat more precisely, it may be said that of our 975 men, 217 were at Oxford (232 if we include those who had also been at some other university); 177 were at Cambridge (191 if we include those had also been elsewhere); 76 came from Scotch universities (Edinburgh 28, Glasgow 21, St. Andrews 16, Aberdeen 11); from Trinity College, Dublin, have come 27 men; 23 (or 47 if we include those who had previously been at some British university) have been to one or more foreign universities (Paris 23, Leyden 9, Padua 6, Utrecht 3, Louvain 3, Gottingen 2, Bonn 2, Heidelberg 2, etc.).[21]

From this rank order of the universities attended by 975 eminent British men and women it would have been an easy step to draw conclusions about the quality of the universities themselves, but Ellis did not make any such inferences, and neither did his successors in the debate over whether nature or nurture produced geniuses. For example, as late as 1947 Walter B. Bowerman, a New York Life Insurance Company actuary, published Studies in

Genius, a book which closely followed the plan and methodology of Ellis' A Study of British Genius. In it, Bowerman examined 1000 Americans of extraordinary intellectual ability. He listed for the 642 of them who had graduated from a college or university the first college or university each had attended in order of how many had attended each. (The leading institutions, in order of how many eminent Americans began their college careers at them, were Harvard, 99; Yale, 65; West Point, 39; Princeton, 31; Columbia, 18; and Bowdoin, 14).[22]

But Bowerman nowhere discussed the implications of his institutional rank order for the quality of the colleges and universities he listed. He even provided a list showing the university, if any, attended by 872 of what he regarded as the 1000 most eminent people who had ever lived, a list of people he derived mostly from the length of their biographical entries in the Encyclopedia Britannica. (The remaining 128 had lived before the rise of universities in the 13th century and thus had no opportunity to attend one). Of these 872, 418 had attended one university or another, with the leading institutions being Oxford, 95; Cambridge, 70; Paris, 20; Edinburgh, 16; Harvard, 16; London, 11; and Dublin, 10.[23] Once again, though, Bowerman did not draw any conclusions from these figures about the relative quality of these universities.

Alick Maclean's Rank Order of Universities that Had "Produced" Distinguished People

Ironically enough, despite the decades-long debate about whether eminent people were the "product" of nature or nurture, what may possibly have been the very first work to list universities in order of how many eminent people they had produced came from the pen of a man who, although he was interested in showing the origins of Britain's "best men," expressed absolutely no opinion about whether distinguished men were the product of nature or nurture. Judging from his book, it is clear that he thought distinguished people were the result of both heredity and environment, although he did not say so explicitly and did not attempt to show that one or the other provided the greater influence. He was the Englishman Alick Henry Herbert Maclean, author of Where We Get Our Best Men (1900).[24] Maclean selected, from a variety of sources, 3068 men who had been alive sometime during the first 60 years of Queen Victoria's reign (1837-1897), although they were not necessarily alive at the end of it.

He discussed these men in terms of several characteristics, most of them background characteristics, such as their nationalities; the counties and towns in which they were born; the number that came from families which had produced, during this period, three or four eminent men; their fathers' occupations; the public schools (in American

terminology, these would be called private schools) they had attended, if any; and the university they had attended, if any. Based on his data, Maclean made numerous generalizations: for example, that very high proportions of eminent men had been produced by, among "nationalities," the Jews; among towns, Aberdeen, Scotland; among rural districts, Dumfries, Scotland; among fathers' occupations, clergyman; and among public schools, Eton (pp. 48-49). Towards the end of his slim book, he provided a rank order of the universities attended by these distinguished men. Of the 3068 of them, 1132 had attended universities in England, Scotland, or Ireland, as follows:

1. Oxford (424)
2. Cambridge (381)
3. Edinburgh (132)
4. London (97)
5. Dublin (73)
6. Glasgow (52)
7. Aberdeen (42)
8. St. Andrews' (18)
9. Belfast College, U. of Ireland (6)
10. Durham (3)
11. Owens College (2)[25]

Although measuring the quality of these universities by the number of eminent men they had produced was not Maclean's primary concern, nevertheless he was alert, far more so than Havelock Ellis had been, to the potential of these statistics for serving as the basis for inferences about these universities as producers of eminent men. He wrote, for example, that although Edinburgh was the third largest "producer" of eminent men, "the Edinburgh figures

are not high, considering the large numbers of men who have passed through that University" (p. 44). And in the same vein he wrote that London University had been founded so recently "that a fairer idea of the position of 'London' will be obtained by doubling its actual figures" (p. 44). Elsewhere, in a table showing how many eminent men, by profession, Oxford, Cambridge, Edinburgh, London, and Dublin had produced, he actually did double London's figures. And for the three smallest "producers," he pointed out that these were "all modern institutions" (p. 44). (All of them had been founded in the 19th century and presumably had had small enrollments in the early years of the period that Maclean covered).

Maclean's table showing universities in order of how many eminent men they had "produced" thus comes close to being a true academic quality ranking. While a few other people and groups before 1900, the year Maclean published his book, had grouped colleges and universities into two or three classes based upon these schools' presumed quality, none of them seems to have produced a true rank order, that is, one having only one university at each "position." And Maclean was sensitive to the fact that his list could be used as a measure of academic quality in a way that those engaging in the nature vs. nurture debate generally were not,[26] pointing out, as I have said, that Edinburgh University's production of eminent men was not high, on a

per capita basis, and that London University's contribution was actually much greater than it appeared.

Promising as these European lists of the university backgrounds of eminent people seem, so far as developing into true academic quality rankings is concerned, they turned out to be a blind alley. They never developed into true academic quality rankings. But when true academic quality rankings were invented, in the United States shortly after the turn of the 20th century, they were based upon a measure not very different from the one the European authors of these lists of the eminent people's university attendance had used. They were based, as I shall show later, on the institutions that had conferred baccalaureate and doctoral degrees on, and especially on the current academic affiliations of one particular type of eminent person -- distinguished American scientists.

Why European Studies of Eminent People Never Developed into True Academic Quality Rankings

Now it is necessary to explain why several decades of European "genius" studies and other European works on the university origins of eminent people never developed into true academic quality rankings. There were several reasons, but they all stem from the fact that the center of the "genius" controversy, and also of the studies like MacLean's on the backgrounds of eminent people, was Europe, not the United States, and the very different nature of

European institutions of higher learning from those in the United States.

For one thing, American colleges and universities at the turn of the 20th century existed within a free-enterprise, highly competitive society, more so than did European universities of the day. In American society, there was an extraordinarily strong emphasis on being the "best," the "biggest," and so on. American institutions of higher learning probably wanted to excel each other more so than did those in Europe. And, unlike universities in some European countries like France and Germany that were supported by the central government, and thus were assured a steady source of income whether or not they excelled relative to others, American colleges and universities, the vast majority of which were privately supported, needed to be considered academically good, or at least better than other colleges and universities, to attract students and support. American institutions of higher learning thus both wanted and needed to excel each other, more so than did European institutions, and academic quality rankings, which ultimately developed in the United States, not in Europe, were a useful means of recording the winners and losers in such a competition.[27]

Second, in each European nation there were relatively few universities. In 1895, Alfred Odin listed 15 university cities, and therefore, since there was only one uni-

versity in each, 15 universities in all France.[28] In Great Britain at the turn of the 20th century, there were about a dozen universities.[29] In Germany shortly after the turn of the 20th century there were only 22, the number listed in the 1906 English translation of Friedrich Paulsen's great German Universities and University Study.[30] In the United States, on the other hand, there were hundreds of colleges and (mostly soi-disant) universities around the turn of the century, some 647 by 1901.[31]

Third, in Europe there was not nearly as much range in the quality of institutions of higher learning as there was in the United States, and, therefore, less need to know what the best and worst schools were since the differences in quality, in any case, would not be very great. The degrees of all German universities, for example, were theoretically equal in prestige. A student of philosophy might decide to attend Heidelburg, a Protestant university, rather than Freiburg, a Catholic one, without even considering these universities', or even their philosophy departments', comparative quality. Similarly, a student of psychology might decide to study in a psychology department that specialized in experimental, rather than introspective psychology, confident that both departments would have faculties about equally well-trained and qualified to teach their courses. Although in actuality German universities did, of course, vary somewhat in quality, they certainly

did not vary nearly as much as did the best and worst American colleges and universities.[32]

Fourth, not only did American colleges and universities differ enormously in quality, but the types and curricular offerings of these schools, even schools in the same field, often differed enormously. In Europe, though philosophy would be taught differently, of course, at a Catholic university from a Protestant one, and psychology differently in an experimentally-oriented department from an introspectionist one, these differences were minor compared to the disciplinary chaos that reigned in America. To use the field of medicine as an example, when Abraham Flexner inspected 155 American and Canadian medical schools before writing his famous 1910 report on medical education in the United States and Canada, he found not only more than 100 more or less "scientific" medical schools, but also 32 sectarian schools of various types -- 15 homeopathic schools, eight eclectic schools, eight osteopathic schools, and one physiomedical school.[33] And the situation in other fields of study was nearly as chaotic. In Europe, on the other hand, fields of study were much more sharply defined. On the continent there was no sectarian medical training, for example, and in England there was almost none.[34] Once again, since there was less diversity in European higher education, in type as well as in quality, there was less need for academic quality rankings and less

likelihood, therefore, that they would be developed.

Fifth, because the European countries were all much smaller geographically than the United States, even the United States of 1900, it was much easier for Europeans to grasp the quality of the universities in their compact countries, without published academic quality rankings, than it was for Americans to grasp the quality of their far-flung colleges and universities, which even then stretched from Maine to California.

Sixth, and closely related to the reason just discussed, the European universities were so much older, as a group, than were American colleges and universities, that it was easier for Europeans to ascertain the quality of their long-established universities than it was for people in the United States. Of 21 German universities listed in the Encyclopedia Britannica in 1910, for example, only five had been founded after 1800, and seven of them had been established before 1500.[35]

Seventh, in some European countries, like Germany, there were nation-wide licensing examinations in nearly every discipline. Such standardized exams, which certify that those who pass them have attained a certain level of excellence, no matter what universities they had attended before taking the exam, reduce the importance of attending a high-quality college or university. Passing the exam, rather than where one has studied before taking the exam,

becomes the important measure of competence in one's field. Even in the United States today, there are far more academic quality rankings of several arts and science disciplines, such as psychology, sociology, and economics, for which there is no standardized licensing examination after one receives the Ph.D., and in which, consequently, the quality of the institutions the student attended serves as an important measure of his or her ability, than there are in fields like law, dentistry, and medicine, in which, after the student earns a degree, he or she still must pass a licensing examination.[36]

Finally, in some European nations, like Germany, precisely because the differences among the quality of institutions were relatively small, students commonly attended several universities during their course of study. Since they could go from one to another without fearing that one would have standards far higher, or an academic program far inferior, to the ones at the university they had just left, they tended to migrate from one to another, and because they often attended two, three, or more universities in their academic careers, starting off at the "best" one, or the "right" one, was not so important as in the United States, where students more often expected to graduate from the first college or university they attended.[37] Once again, European conditions made it less necessary than in the United States to have published

rankings of academic quality.

For all these reasons, then, rank orders of universities were simply not greatly needed in the European nations where the debate over the role of nature and nurture in the development of "genius" raged, so rankings did not develop out of the studies in this field, or even out of studies like Maclean's on the origins of distinguished people.

Even today, when hundreds of rank orders of American colleges, universities, and dozens of liberal arts disciplines and professional fields have been published, few studies have ever been published attempting to rank order the institutions of higher learning of any European nation.

NOTES

[1]Though most of these studies included a small number of women -- with some exceptions like Galton's English Men of Science and Maclean's Where We Get Our Best Men, which were based entirely on eminent males, their authors commonly referred, even in studies based partly upon women subjects, to "men of genius," "men of science," or whatever. Galton, for example, who in Hereditary Genius did discuss a small number of eminent women, including the authors Maria Edgeworth, Charlotte Brontë, Madame de Sévigné, and Madame de Stäel, nevertheless referred throughout this book to his subjects as "eminent men" (p. 2), "men of eminence" (p. 3), and so on. Since both men and women of exceptional ability were included in most of these studies, their titles and their authors' frequent references to their subjects as men notwithstanding, we will refer, throughout, to the subjects of those studies that were based upon both sexes as studies of "men and women."

[2]Following the usage of Francis Galton in his Hereditary Genius, Prefatory Chapter to the edition of 1892 (London: Watts and Co.), 1950, the contributors to this debate used the word "genius" not necessarily to describe someone of great intellectual powers, but rather anyone with "an ability that was exceptionally high, and at the same time inborn" (Galton, ibid., p. viii), "an equivalent for natural ability" (Galton, ibid., p. ix). Under such a broad definition, Galton included judges, military officers, clergymen, and even outstanding oarsmen and wrestlers among his people of "genius." Though later authors contributing to this debate did not generally go as far as Galton in including military officers and athletes in their studies of "genius," they did include many people of ability, talent, and learning whom today would scarcely be considered geniuses. Galton himself admitted that the title of his book "seems apt to mislead, and if it could be altered now, it should appear as Hereditary Ability" (ibid., p. ix).

[3]Candolle was the famous son of an even more famous father, Augustin Pyrame de Candolle (1778-1841). He eventually succeeded his father in the chair of natural history at the University of Geneva, and even, with his own son, labored to complete one of his father's unfinished botanical works. (Entry on Candolle, Encyclopedia Brittannica, 11th edition, vol. 5 [Cambridge: Cambridge U. Press], 1911, pp. 180-181). It is not clear whether the close parallel between the botanical careers of de Candolle

père et fils should be attributed to the influence of heredity, environment, or both.

[4]Both quotations are from Candolle, Histoire des Sciences et des Savants depuis Deux Siècles (Genève: H. Georg), 1873, pp. 196-197. (Translated by David S. Webster).

[5]National Union Catalog, Pre-1956 Imprints, vol. 426 (London: Mansell Information/Publishing), 1976, p. 567.

[6]Alfred Odin, Genèse des Grands Hommes: Gens de Lettres Francais Modernes, vol. 1 (Paris: H. Welter), 1895, p. 527. (Translated by David S. Webster).

[7]Lester F. Ward, Applied Sociology (Boston: Ginn and Co.), 1906, p. 229.

[8]Ward, ibid., p. 250.

[9]Ward, whose Applied Sociology contains an extended and, for the most part, judicious discussion of some of the leading participants in the debate -- although he tends towards the panegyrical in his discussion of Odin -- wrote in that book that "there is an almost universal belief that education has no influence in the production of genius or even of success" (p. 215).

[10]Francis Galton, "Hereditary Talent and Character," Macmillan's Magazine, vol. 12, no. 68, June, 1865, pp. 157-166; "Hereditary Talent and Character," Second Paper, Macmillan's Magazine, vol. 12, no. 70, August, 1865, pp. 318-327.

[11]Galton's definition of the terms was as follows. "Nature is all that a man brings with himself into the world; nurture is every influence from without that affects him after birth." See Galton, English Men of Science: Their Nature and Nurture, second edition (London: Frank Cass and Co.), 1960, p. 12.

[12]Victor L. Hilts, A Guide to Francis Galton's English Men of Science, Transactions of the American Philosophical Society, New Series, vol. 65, part 5 (Philadelphia: American Philosophical Society), 1975, p. 3.

[13]Galton, English Men of Science, ibid., p. 1

[14]Galton, ibid., p. 236.

[15]National Union Catalog, Pre-1956 Imprints, vol. 492

because when a man had attended more than one university, Maclean counted both or all these universities.

[26]Today, when it is nearly universally agreed that both nature and nurture are vitally important in forming people of exceptional abilities and nearly everyone else, it seems odd that most of the early participants in the debate -- up until about 1910 -- believed that one or the other was almost entirely responsible. By World War I, though, most sociologists had concluded that both nature and nurture were important in "producing" geniuses, as Edwin Leavitt Clarke pointed out in American Men of Letters: Their Nature and Nurture, Columbia Studies in History, Economics and Public Law, vol. 168, no. 1 (New York: Columbia U. Press), 1916, pp. 18-19.

[27]It is probably not a coincidence that in turn-of-the-century America, under the strong influence of social Darwinism, many of the forerunners of today's academic quality rankings ranked all the schools in a discipline, even (especially?) the worst ones. For example, the American Medical Association's Council on Medical Education and several accrediting organizations for professional fields, which will be discussed later, often rated all the schools in their respective fields A, B, C, and so on, based upon their purported quality. Indeed, their keenest interest was, if anything, in the lowest-rated schools in each field. The professional associations and accrediting organizations generally wanted these low-ranking schools either to evolve into fitter institutions or to "die."

Today, by contrast, accrediting organizations, both those responsible for professional fields and those responsible for all colleges and universities in a geographical region, almost invariably publish only a single list of "approved" schools and don't publicly stratify or classify the schools they are accrediting. Though they do sometimes place schools on probation, accredit them on "condition," or serve notice that the school will be re-evaluated, because of its shortcomings, after a shorter period of time has elapsed than customary, all these sanctions are generally placed on the school privately, not in published lists of accredited schools. So the worst schools on contemporary lists of accredited institutions are not generally singled out for obloquy, as they were on earlier lists published by accrediting agencies. On rare occasions, though, when a school is considered to be particularly inadequate or especially refractory in its dealings with an accrediting agency, it still may be publicly censured. Thus, in 1963 the North Central Association placed Iowa's Parsons College, which had ignored many of the Association's previous requests for major changes, on "public

probation." See James D. Koerner, The Parsons College Bubble: A Tale of Higher Education in America (New York: Basic Books), 1970, p. 173. And contemporary academic quality rankings typically list only the best, or at least the better, schools in an academic discipline. Often, these studies list only the top 10, 20, 30 or whatever schools in an academic discipline or professional field. In other cases, when an academic quality ranking includes all the schools in a discipline, as did the famous Cartter study cited earlier and its successor, the Roose-Andersen study, only the departments ranked fairly high -- in the top half or so of all the departments in a discipline evaluated -- are ranked in the published report. Some departments ranked lower than the top half or so are listed alphabetically by their broad quality classification, and the lowest-rated departments are not listed at all. See Kenneth D. Roose and Charles J. Andersen, A Rating of Graduate Programs (Washington, D.C.: American Council on Education), 1970.

[28]The cities are listed in Ward, Applied Sociology, ibid., p. 212.

[29]Report of the Commissioner of Education for the Year 1899-1900, vol. 1 (Washington, D.C.: Government Printing Office), 1901, Table 1, p. 1168.

[30]Friedrich Paulsen, The German Universities and University Study, translated by Frank Thilly, Appendix (London: Longmans, Green and Co.), 1906, p. 443. The original version of this book had been published in German in 1893.

[31]Report of the Commissioner of Education for the Year 1900-1901, vol. 2 (Washington, D.C.: Government Printing Office), 1902, p. 1611. Of course, France had, in addition to its universities, institutions such as the Ecole Pratique des Hautes Etudes, the Ecole Polytechnique, and the Ecole Normale Superieure (See Fritz Ringer, Education and Society in Modern Europe [Bloomington: Indiana U. Press], 1979, pp. 122-124). Great Britain had some technical institutions and also colleges for women, art schools, training colleges for elementary school teachers, and others. (Report of the Commissioner of Education for the Year 1899-1900, vol. 1, Table 1, pp. 1168). Germany had, c. 1910, in addition to its universities, several other types of institutions, including ten technical schools and special schools for the study of mining, forestry, agriculture, and commerce, plus schools for the study of veterinary and military science. (Entry on Germany, Encyclopedia Britannica, 11th edition, vol. 12 [Cambridge: Cambridge U. Press], 1910, p. 823 and Ringer, Education

and Society, ibid., pp. 37-38).

[32]According to Professor Fritz Ringer, personal communication, November 26, 1980.

[33]Abraham Flexner, Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching, Bulletin no. 4 (Boston: D.B. Updike, the Merrymount Press), 1910, p. 158.

[34]Abraham Flexner, Medical Education in Europe: A Report to the Carnegie Foundation for the Advancement of Teaching (Boston: D.B. Updike, the Merrymount Press), 1912, pp. 308-309.

[35]Entry on Germany, Encyclopedia Britannica, 1910, ibid., p. 823.

[36]I am indebted to Professor Fritz Ringer for pointing this out to me in a personal communication, April 28, 1981. For the same reason, by the way, today American professors of English, history, philosophy, and other disciplines in which there are no standardized licensing examinations, are probably judged more -- five, ten, or even twenty years after receiving their Ph.D. -- by the quality of the institution from which they earned it than are, say, lawyers, doctors, and dentists judged by where they received their law, medical, and dentistry degrees.

[37]For example, to illustrate this point with an example from the area of graduate education, a 1902 study commissioned by the Association of American Universities comparing students at American universities who had received their Ph.D.'s from 1896-1901 with those at German universities who had received doctoral degrees in the same period found that "about two-thirds of the German doctors of Philosophy have studied at more than one university, while in America less than one-third have migrated." See E.A. Birge, "Report on Statistics Concerning the Migration of Graduate Students," Association of American Universities, Journal of Proceedings and Addresses of the Third Annual Conference (Chicago: Association of American Universities), 1902, p. 45.